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WPW 7-22 E Set

Neat energy.

The heat pump WPF E with the GWS module draws its heating energy from the latent energy stored in groundwater. Through an appropriately sized on-site well, the heat pump WPF E exploits a practically never-ending energy source. After all, in our region, there is no shortage of groundwater. Two well boreholes are sufficient to be able to utilise the energy in groundwater. In many cases that is more favourable than drilling for geothermal probes for a brine|water heat pump. One benefit: All year round, groundwater has a relatively constant temperature, enabling the heat pump to operate with a consistently high COP. The high grade equipment inside the GWS module, such as the plate heat exchanger made from corrosion-resistant stainless steel, ensures a long service life and safe operation. The GWS module can be combined with almost all brine|water heat pumps.



Example WPF

The most important features

- Six output levels
- Extremely quiet operation
- High operational reliability
- High COP through the utilisation of the heat source temperature offered by groundwater
- Integral heat pump control unit
- Heating flow temperature up to + 60 °C

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Type				
Type	WPW 06 Set	WPW 07 Set	WPW 10 Set	WPW 13 Set
Part no.	232948	232949	232950	232951
Output at W10/W35 (EN 14511)	5,99 kW	7,26 kW	9,60 kW	13,25 kW
Energy efficiency category, average climate condition, W55/W35	A++/A++ [1)]	A++/A++ [1)]	A++/A++ [1)]	A++/A++ [1)]

Note on the energy efficiency category: The data corresponds to the official requirements for room heaters, which will be compulsory from September 2015 (EU Regulation no. 811/2013), based on the data from EN 14511 and EN 14825 for heating heat pumps.

Efficiency categories denoted with [1)] meet the requirements for the A+++ rating, as applicable from September 2019.

Specification				
Height	1319 mm	1319 mm	1319 mm	1319 mm
Flow rate WP/GWS (30 % ethylene glycol)	1,40 m³/h	1,80 m³/h	2,50 m³/h	3,80 m³/h
Width	598 mm	598 mm	598 mm	598 mm
Pressure drop WP/GWS (30 % ethylene glycol)	98 hPa	134 hPa	240 hPa	465 hPa
Depth	658 mm	658 mm	658 mm	658 mm
Flow rate GWS	1,40 m³/h	1,70 m³/h	2,30 m³/h	3,40 m³/h
Weight	150 kg	152 kg	157 kg	169 kg
Pressure drop GWS	76 hPa	107 hPa	205 hPa	426 hPa
Refrigerant	R410 A	R410 A	R410 A	R410 A
Starting current	27 A	27 A	20 A	23 A
Refrigerant capacity	1,05 kg	1,40 kg	1,90 kg	2,25 kg
Output at W10/W35 (EN 14511)	5,99 kW	7,26 kW	9,60 kW	13,25 kW
Power consumption at W10/W35 (EN 14511)	1,04 kW	1,23 kW	1,57 kW	1,99 kW
DHW flow/return plug-in connection				
Coefficient of performance at W10/W35 (EN 14511)	5,76	5,90	6,11	6,67
Heat source flow/return plug-in connection				
Heating flow/return plug-in connection				
External pressure differential, heating side				
External pressure differential, source side				
Heating output at B7/W35	5,62 kW	6,82 kW	8,97 kW	12,33 kW
Internal volume on heating side	5,40 l	6,10 l	6,10 l	6,70 l
Power consumption at B7/W35	1,05 kW	1,22 kW	1,56 kW	2,01 kW
Coefficient of performance at B7/W35	5,38	5,58	5,74	6,14
Cooling capacity at B15/W23				
Power consumption, emergency/booster heater	8,80 kW	8,80 kW	8,80 kW	8,80 kW

Rated heating flow rate				
Heating flow rate (min.)				
Heating flow rate (EN 14511) at A7/W35, B0/W35 and 5 K				
Flow rate, heat source side				
Internal volume on brine side	9,10 l	9,70 l	10,50 l	11,30 l
Min. application limit on the heating side	15 °C	15 °C	15 °C	15 °C
Max. application limit on the heating side	60 °C	60 °C	60 °C	60 °C
Heat source application limit (min.)	7 °C	7 °C	7 °C	7 °C
Heat source application limit (max.)	20 °C	20 °C	20 °C	20 °C
Current (with/without softstarter)	27 A	27 A	20 A	23 A
Operating current max.				
Energy efficiency category, average climate condition, W55/W35	A++/A++ [1)]	A++/A++ [1)]	A++/A++ [1)]	A++/A++ [1)]
Sound power level (EN 12102)				
Water hardness				
pH value (with aluminium compounds)	8,0-8,5 mg/l	8,0-8,5 mg/l	8,0-8,5 mg/l	8,0-8,5 mg/l
pH value (without aluminium compounds)	8,0-10,0 mg/l	8,0-10,0 mg/l	8,0-10,0 mg/l	8,0-10,0 mg/l
Chloride				
Conductivity (softening)				
Conductivity (desalinating)	20-100	20-100	20-100	20-100
Oxygen 8-12 weeks after filling (desalinating)				
Oxygen 8-12 weeks after filling (softening)				

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Type		
Type	WPW 18 Set	WPW 22 Set
Part no.	232952	232953
Output at W10/W35 (EN 14511)	16,82 kW	21,48 kW
Energy efficiency category, average climate condition, W55/W35	A++/A++ [1)]	A++/A++ [1)]

Note on the energy efficiency category: The data corresponds to the official requirements for room heaters, which will be compulsory from September 2015 (EU Regulation no. 811/2013), based on the data from EN 14511 and EN 14825 for heating heat pumps.

Efficiency categories denoted with [1)] meet the requirements for the A+++ rating, as applicable from September 2019.

Specification		
Height	1319 mm	1319 mm
Flow rate WP/GWS (30 % ethylene glycol)	4,60 m³/h	5,80 m³/h
Width	598 mm	598 mm
Pressure drop WP/GWS (30 % ethylene glycol)	268 hPa	436 hPa
Depth	658 mm	658 mm
Flow rate GWS	4,20 m³/h	5,40 m³/h
Weight	171 kg	181 kg
Pressure drop GWS	221 hPa	365 hPa
Refrigerant	R410 A	R410 A
Starting current	23 A	25 A
Refrigerant capacity	2,30 kg	2,32 kg
Output at W10/W35 (EN 14511)	16,82 kW	21,48 kW
Power consumption at W10/W35 (EN 14511)	2,73 kW	3,79 kW
DHW flow/return plug-in connection		
Coefficient of performance at W10/W35 (EN 14511)	6,16	5,67
Heat source flow/return plug-in connection		
Heating flow/return plug-in connection		
External pressure differential, heating side		
External pressure differential, source side		
Heating output at B7/W35	15,79 kW	20,14 kW
Internal volume on heating side	7,30 l	7,30 l
Power consumption at B7/W35	2,73 kW	3,78 kW
Coefficient of performance at B7/W35	5,78	5,33
Cooling capacity at B15/W23		
Power consumption, emergency/booster heater	8,80 kW	8,80 kW

Rated heating flow rate		
Heating flow rate (min.)		
Heating flow rate (EN 14511) at A7/W35, B0/W35 and 5 K		
Flow rate, heat source side		
Internal volume on brine side	11,80 l	12,30 l
Min. application limit on the heating side	15 °C	15 °C
Max. application limit on the heating side	60 °C	60 °C
Heat source application limit (min.)	7 °C	7 °C
Heat source application limit (max.)	20 °C	20 °C
Current (with/without softstarter)	23 A	25 A
Operating current max.		
Energy efficiency category, average climate condition, W55/W35	A++/A++ [1)]	A++/A++ [1)]
Sound power level (EN 12102)		
Water hardness		
pH value (with aluminium compounds)	8,0-8,5 mg/l	8,0-8,5 mg/l
pH value (without aluminium compounds)	8,0-10,0 mg/l	8,0-10,0 mg/l
Chloride		
Conductivity (softening)		
Conductivity (desalinating)	20-100	20-100
Oxygen 8-12 weeks after filling (desalinating)		
Oxygen 8-12 weeks after filling (softening)		

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Info hotline

Any questions? We would love to help. Call us on 0800 7020700.

Our trade partners

Our competent local contacts will assist you if you have any questions.

Installation information

Please ask your local power supply utility or a registered electrician to install appliances that are not fully wired, i.e. ready to plug in. The electrician should also be able to assist you with obtaining the agreement of the respective power supply utility required for the appliance installation.